

AMENDMENTS TO THE CLAIMS

1 (original): A vehicle, comprising:

a frame;

an engine mounted to said frame;

an output drive shaft rotatably mounted relative to said frame, said output drive shaft being configured for selectively conveying one of forward drive power and reverse drive power to at least one wheel;

an input drive shaft rotatably mounted relative to said frame intermediate to said engine and output shaft and operatively coupled to said engine and output shaft, said input drive having an associated input drive output direction;

a first differential operatively coupled with said input drive shaft, said first differential having a pair of directional settings, a chosen said directional setting determining said input drive output direction, said directional setting being selectably one of a forward setting and a reverse setting; and

a reverser mechanism operatively associated with said first differential, said reverser mechanism being configured for selectably enacting one of said forward setting and said reverse setting of said first differential.

2 (original): A vehicle, comprising:

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a frame;

an output drive shaft rotatably mounted relative to said  
frame, said output drive shaft being configured for providing a  
5 drive output;

a swing-arm member pivotally mounted upon said output drive  
shaft, said swing-arm member including a swing-arm chain drive,  
said swing-arm chain drive operatively receiving said drive  
output of said output drive shaft; and

10 a wheel rotatably coupled to an end of said swing-arm  
member, said swing-arm chain drive configured for transferring  
said drive output of said output drive shaft to said wheel.

3 (original): An off-road vehicle, comprising:

a frame including a main frame portion and a slam hatch  
door, said slam hatch door being selectively one of pivoted into  
an open position relative to said main frame portion and locked  
5 in a closed position relative thereto, said main frame portion  
and said slam hatch door in said closed position together  
defining a full roll cage for a passenger in said off-road  
vehicle;

at least one front wheel; and

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10           a rack-and-pinion steering system operatively coupled with  
each said front wheel, said rack-and-pinion steering system  
including a steering wheel, said steering wheel being rotatably  
fixed relative to said slam hatch door, said steering wheel being  
concurrently relatively pivoted upon pivoting of said slam hatch  
15 door.

4 (new): The vehicle of claim 1, wherein said input drive  
shaft further has an input drive input direction, said engine  
being supplied only with forward gearing, said engine thereby  
being configured for rotating said input drive shaft solely in a  
5 first said input drive input direction, said input drive output  
direction being determined by said chosen setting of said first  
differential.

5 (new): The vehicle of claim 1, wherein said first  
differential has a detent engagement coupling associated  
therewith, said detent engagement coupling being selectably  
movable into one of a coupled position and a decoupled position.

6 (new): The vehicle of claim 5, wherein said coupled  
position and said decoupled position activate said forward  
setting and said reverse setting, respectively, of said first  
differential.

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7 (new): The vehicle of claim 5, wherein said reverser mechanism is configured for selectably moving said detent engagement coupling into said one of a coupled position and a decoupled position.

8 (new): The vehicle of claim 1, wherein said reverser mechanism includes a reverser lever, a reverser cable, a reverser actuation system, and a love-joy coupling.

9 (new): The vehicle of claim 9, wherein said reverser lever is selectively movable by a vehicle driver into one of a first lever location and a second lever location, said first lever location and a second lever location corresponding to said forward setting and said reverse setting, respectively, said reverser lever being operatively coupled with said reverser actuation system via said reverser cable, said love-joy coupling being operatively associated with said first differential, said love-joy coupling being selectively movable into one of a coupled position and a decoupled position, said coupled position configured for inducing said forward setting of said first differential, said decoupled position configured for producing said reverse setting of said first differential, said reverser mechanism being configured for selectably moving said love-joy

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15 coupling into one of said coupled position and said decoupled position based on said chosen one of said first lever location and said second lever location.

10 (new): The vehicle of claim 1, further comprising a seat mounted on said frame, said seat having a seat back, said input drive shaft and said output drive shaft each being positioned proximate said seat back.

11 (new): The vehicle of claim 2, wherein said output drive shaft has an output shaft differential associated therewith, said output shaft differential configured for receiving a drive power input for said output drive shaft.

12 (new): The vehicle of claim 11, wherein said output drive shaft further has a first disk brake mounted thereon, said first disk brake being operatively associated solely with one said wheel, said first disk brake being configured for selectively  
5 braking said one said wheel by interrupting a transfer of power thereto via said swing-arm chain drive.

13. (new): The vehicle of claim 2, further comprising an adjustable shock absorber operatively linking said wheel with said frame, an adjustment of said shock absorber inducing a change of position of said wheel relative to said frame.

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14. (new): The vehicle of claim 2, wherein said wheel is a first wheel, said swing-arm being a first swing-arm member, said vehicle further comprising a second wheel, a second swing-arm member, and an output drive differential.

15. (new): The vehicle of claim 14, wherein said first wheel is operatively coupled with said output drive shaft via said first swing-arm member, said second wheel being operatively coupled with said output drive shaft via said second swing-arm member, said first swing-arm member and said second swing-arm member being mounted on opposing ends of said output drive shaft, said output differential being operatively located on said output drive shaft intermediate of said first swing-arm member and said second swing-arm member, said output differential being  
5 configured for converting a drive input into said drive output to said output drive shaft, said drive output being separably delivered to said first swing-arm member and said second swing-arm member via operation of said output differential.  
10

16. (new): The vehicle of claim 15, further comprising a first disk brake assembly and a second disk brake assembly, said first disk brake assembly and said second disk brake assembly being operatively mounted on said output drive shaft proximate

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5 said first swing-arm member and said second swing-arm member,  
respectively.

17. (new): The vehicle of claim 15, wherein said first disk  
brake assembly and said second disk brake assembly are capable of  
being separately actuated, said first disk brake assembly and  
said second disk brake assembly being selectively operable only  
5 over a braking of said first wheel and said second wheel,  
respectively.

18. (new): The off-road vehicle of claim 3, wherein said slam  
hatch door includes a door pivot mount at a first end thereof and  
a hatch release mechanism at a second end thereof, said door  
pivot mount being rotatably fixed to said main frame, said hatch  
release mechanism including at least one engagement pin, said at  
5 least one engagement pin being configured so as to be normally  
biased into an engagement-promoting position, the engagement-  
promoting position being such that said at least one engagement  
pin locks said hatch release mechanism in place relative to said  
10 main frame when said slam hatch door is in the closed position,  
said hatch release mechanism including a quick release handle  
configured for facilitating a movement of said at least one

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engagement pin away from the engagement-promoting position thereof.

19. (new): The off-road vehicle of claim 18, further comprising at least one hatch cylinder operatively connected to each of said main frame and said slam hatch door proximate said door pivot mount, each said hatch cylinder being configured for  
5 biasing said slam hatch door fully toward the open position thereof upon the disengagement of said hatch release mechanism.

20. (new): A vehicle comprising:

a frame;

a pair of front suspension systems positioned at opposing sides of said frame, each said front suspension system including  
5 an upper suspension member and a lower suspension member;

a plurality of interconnect pivot assemblies, each said interconnect pivot assembly attaching one of a said upper suspension member and a said lower suspension member to said frame, each said interconnect pivot assembly including an  
10 interconnect pivot and a threaded engagement member, each threaded engagement member being adjustably threadedly inserted to a given insertion length into a said one of a said upper suspension member and a said lower suspension member; and



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a pair of front wheels, one of each said wheels being  
15 mounted upon a respective said front suspension system.

21 (new): The vehicle of claim 20, wherein each said given  
insertion length is chosen so as to thereby influence at least  
one of an angle and a vertical position of a given said wheel  
relative to said frame.

22 (new): The vehicle of claim 20, wherein a said given  
insertion length can be up to about three inches.

23 (new): The vehicle of claim 20, further comprising a pair  
of adjustable-length shock absorbers, each said shock absorber  
interconnecting said frame with one of said front suspension  
systems, a shock length adjustment in a given shock absorber  
5 producing a change in a vertical position of a corresponding  
wheel relative to said frame.

24 (new): The vehicle of claim 23, wherein a combination of a  
said shock length adjustment and a change in at least one said  
insertion length associated with a given said wheel permit each  
said wheel to independently have a potential vertical adjustment  
5 range of about 12 to 16 inches.

25 (new): The vehicle of claim 23, wherein a combination of a  
said shock length adjustment and a change in at least one said

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insertion length associated with a given said wheel permit each  
said wheel to independently have a potential horizontal  
adjustment range of about 4 to 5 inches.

26. (new): An off-road recreational vehicle comprising:

a frame including a main frame portion and a pivotable,  
selectively-releasable slam hatch door, said main frame portion  
and said slam hatch door defining a full roll cage, said frame  
including a forward portion and a rear portion;

an first front suspension assembly adjustably mounted  
relative to said forward portion of frame and carrying a first  
front wheel, said first front suspension assembly being  
configured to permit a first wheel position adjustment of any one  
of an angle, a vertical placement, and an angular placement of  
said first front wheel relative to said frame;

an second front suspension assembly adjustably mounted  
relative to said frame and carrying a second front wheel, said  
second front suspension assembly being configured to permit a  
second wheel position adjustment of any one of an angle, a  
vertical placement, and an angular placement of said second front  
wheel relative to said frame, any said second wheel position

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adjustment being made independently of any said first wheel  
position adjustment;

20           a rack-and-pinion steering system carried by said frame and  
operatively associated with said first wheel and said second  
wheel;

          a drive chain system mounted to said rear portion of said  
frame, said drive chain system including, operatively connected  
25   in order, an engine; a input drive shaft carrying a reverser  
mechanism; and an output drive shaft carrying an output  
differential and a pair of swing-arm drive mechanisms, said  
swing-arm drive mechanisms being located on opposite sides of  
said output differential, each said swing-arm drive mechanism  
30   including a swing-arm drive chain;

          a pair of independently-operable disk brake mechanisms  
carried on said output drive shaft, each disk brake mechanism  
being operatively associated with only one said swing-arm drive  
mechanism; and

35           a pair of rear wheels, each said rear wheel being  
independently carried by a respective said swing-arm drive  
mechanism, said each said rear wheel being selectively driven by

Application No.: 10/673,628  
Amendment Dated October 17, 2003  
Preliminary Amendment

Attorney Docket No.: BRS-1

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said swing-arm drive chain corresponding to said respective said  
swing-arm drive mechanism.